

IntraCore 3524 Series

24-port 10/100 Managed Switch with Gigabit Uplinks



The IntraCore 3524 Series is Asanté's most powerful, flexible family of workgroup switches. Tailor this IntraCore switch with hardware and software to precisely match your network needs—today and in the future.

- Start with a **base configuration** of a 24-port 10/100 switch and 2 option slots.
- Choose from 3 different modules for Gigabit or Fast Ethernet, copper or fiber.
- Deploy multimedia services (voice, video, audio, telephony) throughout your network with multi-service technologies: IP multicast with IGMP, multiple priority queues and 64 VLANs.
- Highest Level of Priority Queues supported 4 on each 10/100 port and 8 on Gigabit ports. This advanced QoS software option is ideal for sophisticated Ethernet service, including multi-tenant unit (MTU) installations.

Add additional IntraCore 3524 switches to service more ports. Asanté OneView™ management architecture reduces the cost of network administration for up to 8 units with 194 ports over a single IP address. Choose telnet, SNMP or web browser interfaces over in-band Ethernet or out-of-band serial communications.

FEATURES AND BENEFITS

Single-Chip Layer 2 Switch:

Forwarding rate of 9.5 million packets per second at full wire speed over all network interfaces in a unit

6.4 Gbps switch fabric (per unit) minimizes blocking and latency

Coupled to embedded PowerPC RISC processor to handle advanced features

Runs cooler and more reliably than older, multi-chip designs

Extensible Platform:

Choose from 3 popular configurations—or custom configure the switches for your network

Run multi-mode fiber at 100 Mbps (100BaseFX) or 1000 Mbps (1000BaseSX)

Run standard Category 5 UTP copper cables up to 100 meters at 1000 Mbps (1000BaseT)

Asanté OneView Architecture:

Dramatically simplify network management tasks for multiple switches

Support larger workgroup clusters—up to 194 ports—over industry-standard Gigabit Ethernet Single IP address consolidates system configuration, network monitoring and management tasks Choose in-band or out-of-band management tools: telnet, SNMP or web browser (Windows or Mac OS)

Multi-Services for Multimedia:

Multiple priority queues ensure mission critical applications get the bandwidth and priority they need:

- 4 transmit queues per 10/100 port
- 8 queues per gigabit port
- Priority allocated on a port basis using Weighted Fair Queue (WFQ)
- 2 packet dropping criteria using Weighted Random Early Detect (WRED)

Throughput is maintained—even under heavy traffic conditions

Internet group management protocol (IGMP) optimizes multicast bandwidth by allowing multicast traffic only to

registered users; minimizes denial of service attacks from unknown sources

Virtual LANs:

Logically organize nodes into 64 VLANs compliant with IEEE 802.1Q with VLAN Tagging

Overlapping VLANs are ideal for sharing and segmenting traffic and security

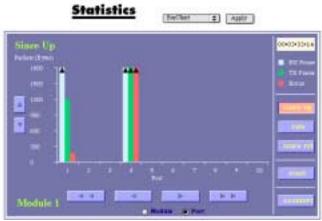
GARP VLAN registration protocol (GVRP) dynamically creates and manages VLANs on 802.1Q trunks. Prunes

unnecessary broadcast/unicast traffic and automatically configures compatible GVRP switches

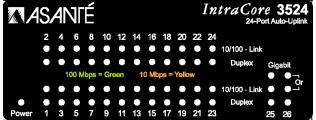
Total Cost of Ownership:

Lowest acquisition cost for an enterprise-grade, workgroup switch

Comprehensive IntraCare™ 3-year warranty and optional advanced support contract. Optional AsantéCare™ extended warranty and technical support for additional years



Graphically monitor your network by using the software tools built into the IntraCore 3524



Multi-colored LED status indicators clearly display comprehensive network conditions

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SPECIFICATIONS

Fast Ethernet with Auto-Uplink™ (100BaseTX, 10BaseT): RJ-45 Connectors:

Console: Serial (RS-232): DB9

2 front-mounted slots for Type IC35 modules (Gigabit or Fast Ethernet, copper or fiber) Expansion:

Optional Fast Ethernet (100BaseFX): SC

Optional Gigabit Ethernet with Auto-Uplink (100BaseT, 100BaseTX, 10BaseT): RJ-45

Optional Gigabit Ethernet (1000BaseSX): SC

Separate link-activity, speed (10/100/Gigabit) and duplex (full or half) LEDs for each port; system power Status Indicators:

Management Features

Graphical User Interface: HTML browser-based with password protection for local and remote management

Command Line Interface: Menu-driven telnet or out-of-band via front panel console port Front Panel: Graphical representation of unit with real-time network status

General Information: Software version, dual firmware banks; admin, system and bootstrap info; switch address and uptime system clock Statistics: User-configurable graph types (bar chart, line chart, table); counters (since up, rate, since reset) for RX/TX/Error for

each port and unit. Table view also shows current, peak average and total packets for each port

Port Configuration: State (forwarding, blocking), status (enabled, disabled), link status (up, down) and mode (speed, duplex); auto

> negotiation, flow control, priority and security. Detailed statistics include TX counters (total frames, total bytes, dropped frames), RX counters (total frames, total bytes, unicast, non-unicast), frame counters (multicast, broadcast, by packet sizes), collisions and errors (undersized, oversized, CRC/alignment, fragments, FCS, late events, total)

Displays bridge ID, designated root, root port, root port cost, hello time, maximum age and forward delay; ports Spanning Tree:

individually configurable for STP parameters (priority, path cost)

SNMP: Separate read and write communities, and trap authentication; 4 configurable trap receivers (IP address and

community)

Address Table: Per-port counts for MAC and IP addresses; integrated utilities to sort or search for specific IP or MAC addresses;

address table shows unit, port, entry (dynamic, static or multiple), IP address, MAC address and VID

VLAN: 64 VLAN's supported. Configurable PVID, frame type and ingress filtering IEEE802.1D/p/Q standards – 4 queues per 10/100 port, 8 queues on Gigabit ports QoS:

Link Aggregation: IEEE802.1ad – 2 Trunk groups for 10/100 ports (4 ports for each group), 1 Trunk for 2 Gigabit ports, Load sharing on

link aggregation is supported based on destination address.

4MB shared on all ports 10/100 and Gigabit. **Buffer Memory:**

Embedded remote monitoring supports four groups (history, statistics, alarms and events) RMON:

Configurable per-port security with programmable action (e.g., new node detection trap) and trusted MAC address Security:

Windows 95/98/Me/NT/2000/XP, Mac OS 9/X and Linux Supported OS:

Integrated utility to detect duplicate IP addresses (port, owner MAC address, IP address and spoofer MAC address) Other:

Physical Characteristics

IntraCore 3524: 435mm x 257mm x 41mm (17.125" x 10.125" x 1.625") . 8.0 lbs (3.6 Kg)

Mounting: Install into a standard 19-inch rack (1 RU height) or placed on a desktop; rackmount kit and rubber feet included

Capacity: Stack or cluster up to 8 units (194 ports) using any IC 3524 Gigabit module or special stacking kit

IC35 Modules: 2.19 x 3.63 x 1.19 (56 x 92 x 30 mm), 0.13 lbs (0.06 Kg)

Environmental Range

32° to 104° F (0° to 40° C) Operating Temperature: Relative Humidity: 10% to 90% non-condensing

Auto-switching, 110/240 VAC, 50/60 Hz; grounded IEC cord Power:

Standards Compliance

IEEEE: IEEE 802.1D spanning tree and bridge filters

IEEE 802.1p prioritization (class of service)

IEEE 802.1Q virtual LAN (VLAN) IEEE 802.3ad link aggregation

IEEE 802.3x full duplex and flow control

IEEE 802.3z 1000BaseSX over 50 micron multi-mode fiber; maximum distance 1,804 feet (550 meters) IEEE 802.3ab 1000BaseT over Category 5 UTP (4 pairs); maximum distance 328 feet (100 meters) IEEE 802.3u 100BaseTX over Category 5 UTP (2 pairs); maximum distance 328 feet (100 meters) IEEE 802.3 10BaseT over Category 3 UTP (2 pairs); maximum distance 328 feet (100 meters)

IETF: RFC 1155 SMI

RFC 1757 RMON RFC 1157 SNMP RFC 1493 Bridge MIB RFC 1213 MIB II Asanté Private MIB

Safety: UL 1950, CUL, TUV/GS, Emissions: FCC Class A, CE

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Technical Support and Warranty

IntraCare™:

Free technical support and optional advanced warranty support for 3 years. Includes free telephone support, 24-hour support via web and ftp, complete product warranty with 2nd business day advanced replacement (US only) and

software maintenance agreement. Outside USA, please contact your distributor or resale partner.

AsantéCare: Optional extended technical support and product warranty for additional years

ORDERING INFORMATION



Model IntraCore 3524 Base IntraCore 3524-2G IntraCore 3524-2T	Description 24-port 10/100 managed switch with 2 available slots 24-port 10/100 managed switch with 2-1000BaseX GBIC holder modules 24-port 10/100 managed switch with 2 ports of 10/100/1000BaseT	Asanté Part Number* 99-00678-01 99-00677-01 99-00679-01
IC35-GBIC IC35-1000T IC35-1000SX IC35-100MMFX IC35-SKT	1000BaseX GBIC holder module 10/100/1000BaseT switch port module, RJ45 connectors 1000BaseSX switch port module, SC connectors 100BaseFX multi-model fiber port switch module, SC connectors IC3524 stacking kit with 2 x Gigabit stacking modules (RJ45), 0.5 meter stacking cable Software CD included.	99-00682-01 99-00681-01 99-00691-01 99-00692-01 99-00710-01
AsantéCare		
AC3524-01 AC3524-02 AC3524CA-01 AC3524CA-02 International customers please conta	Upgrade US Warranty for 3 – 4 years Upgrade US Warranty for 3 – 5 years Upgrade Canadian Warranty for 3 – 4 years Upgrade Canadian Warranty for 3 – 5 years ct your local distributor for AsantéCare extended Warranty charges	99-00701-01 99-00702-01 99-00703-01 99-00704-01
1000BaseT Cable-5M 1000BaseT Cable-10M	Gigabit Certified Category 5E cable in translucent graphite with molded cable boots, 5 meters Gigabit Certified Category 5E cable in translucent graphite with molded cable boots, 10 meters	

 $^{^{\}star}$ For international part numbers, please refer to the Asanté price list.



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